

AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims.

1. (Canceled)
2. (Previously Presented) The method of claim 50, further comprising:
specifying a feature-value set for a plurality of devices, the feature-value set including a set of
selected device features with one or more discrete feature values assigned to each of the
selected device features, wherein each of the selected device features is selected from the
features of the plurality of devices in accordance with a pre-established criterion.
3. (Previously Presented) The method of claim 2, wherein the set of selected device
features comprises either display size, aspect ratio, display line count, color capability, graphics
capability, variable size text capability, different font capability, input capability, input
bandwidth, or a combination thereof.
4. (Previously Presented) The method of claim 2, wherein the pre-established criterion
includes a determination that a particular selected device feature affects the manner in which the
authored content is presented.
5. (Previously Presented) The method of claim 2, wherein the feature value set comprises
discrete values assigned to selected features of a generic device.

6. (Previously Presented) The method of claim 5, wherein the generic device comprises a set of device features selected from the display features of the plurality of devices.

7. (Canceled)

8. (Previously Presented) The method of claim 50, wherein the determination to convert the device-independent content comprises:

identifying a metatag section of the markup information corresponding to the device feature values associated with the device.

9. (Previously Presented) The method of claim 50, wherein the determination to convert the device-independent content comprises:

determining to remove the markup information from the device-independent content.

10. (Previously Presented) The method of claim 50, further comprising:

analyzing the device-independent content; and

determining to embed meta-data into the device-independent content, the meta-data comprising device feature values based, at least in part, on the device-independent content.

11. (Previously Presented) The method of claim 50, wherein the requesting device comprises at least one of a wireless telephone and a personal digital assistant.

12. (Previously Presented) The method of claim 50, further comprising:
identifying the requesting device prior to identifying one or more of the device feature values associated with the device.
13. (Previously Presented) The method of claim 12, wherein identifying the requesting device comprises reading device information contained in the request.
14. (Previously Presented) The method of claim 50, wherein the determination to convert the device-independent content comprises:
determining an array of display pixels available in the requesting device based, at least in part, on the device feature values associated with the device;
comparing the array of display pixels with an array of image pixels corresponding to an image in the device-independent content;
selecting the image for display in the requesting device if the array of image pixels does not exceed the array of display pixels; and
determining to suppress said image from display if the array of image pixels does exceed the array of display pixels.
15. (Previously Presented) The method of claim 50, wherein the determination to convert the device-independent content comprises:
determining an aspect ratio for the requesting device from the device feature values associated with the device;
determining to send content marked with an attribute of square to the requesting device if the aspect ratio is square;

determining to send content marked with an attribute of portrait to the requesting device if the aspect ratio is portrait; and
determining to send content marked with an attribute of landscape to the requesting device if the aspect ratio is landscape.

16. (Previously Presented) The method of claim 50, wherein the determination to convert the device-independent content comprises:

determining that the device-independent content is marked as having a uni-axis free form characteristic;
identifying the number of segments supported by the display in the requesting device;
concatenating a number of rows for sending to the requesting device if the uni-axis free form characteristic includes a list characteristic, wherein the number of rows corresponds to the number of segments supported; and
concatenating a number of columns for sending to the requesting device if the uni-axis free form characteristic includes a column characteristic, wherein the number of columns corresponds to the number of segments supported.

17. (Previously Presented) The method of claim 50, wherein determination to convert the device-independent content comprises:

determining that the device-independent content is marked as having bi-axially free form characteristic;
identifying the character count supported by a display in the requesting device;
determining to send to the requesting device a segment of content, wherein the character count in the segment corresponds to the character count supported by the display.

18-19. (Canceled)

20. (Previously Presented) The system of claim 51, further comprising a device profile repository accessible by the device detector, the device profile repository including a feature-value set for the requesting device, the feature-value set including a set of selected device features with one or more discrete device feature values assigned to each of the selected device features.

21. (Previously Presented) The system of claim 51, further comprising a content repository accessible by the origin server, the content repository for storing annotated authored content whereby the origin server provides device-independent content from the annotated authored content.

22. (Previously Presented) The system of claim 51, wherein the at least one device feature value is selected from the features of the requesting device in accordance with a pre-established criterion.

23. (Previously Presented) The system of claim 51, wherein the set of device feature values associated with the requesting device comprises a member of the group consisting of display size, aspect ratio, display line count, color capability, graphics capability, variable size text capability, different font capability, and input capability.

24. (Previously Presented) The system of claim 51, wherein the requesting device comprises at least one of a wireless telephone and a personal digital assistant.

25. (Canceled)

26. (Previously Presented) The non-transitory computer-readable storage medium of claim 52, wherein the step of determining to convert comprises:

determining to convert the content by interpreting metatags embedded in the content.

27. (Previously Presented) The non-transitory computer-readable storage medium of claim 52, wherein the step of determining to convert comprises:

determining to convert the content into a landscape-formatted display format if the device has a landscape-formatted display; and

determining to convert the content into a portrait-formatted display format if the device has a portrait-formatted display.

28. (Previously Presented) The non-transitory computer-readable storage medium of claim 52, wherein the step of determining to convert comprises:

determining to convert the content into a first aspect ratio if the device has the first aspect ratio; and

determining to convert the content into a second aspect ratio if the device has the second aspect ratio.

29. (Previously Presented) The non-transitory computer-readable storage medium of claim 52, wherein the step of determining to convert comprises:

determining to convert the content into a small-sized image if the device accommodates only small-sized images, and

determining to convert the content into a large-sized image if the device accommodates large-sized images.

30. (Previously Presented) The non-transitory computer-readable storage medium of claim 52, wherein the apparatus is caused to further perform:

determining to annotate the content with meta-data to indicate the manner in which portions of the content should be represented on a plurality of different devices having incompatible display characteristics.

31. (Previously Presented) The non-transitory computer-readable storage medium of claim 52, wherein determining to convert comprises:

determining to perform a best-fit match between the device display characteristics and one of a plurality of display formats.

32. (Canceled)

33. (Previously Presented) The method of claim 53, wherein identifying comprises:

determining a device type of the requesting device, and looking up the one or more display feature values based, at least in part, on the device type.

34. (Previously Presented) The method of claim 53, wherein one of the one or more display feature values corresponds to a display size of the requesting device.

35. (Previously Presented) The method of claim 53, wherein one of the one or more display feature values corresponds to an aspect ratio of the requesting device.

36. (Previously Presented) The method of claim 53, wherein one of the one or more display feature values corresponds to a display line count of the requesting device.

37. (Previously Presented) The method of claim 53, wherein one of the one or more display feature values corresponds to a color capability of the requesting device.

38. (Previously Presented) The method of claim 53, wherein one of the one or more display feature values corresponds to a variable size text capability of the requesting device.

39. (Previously Presented) The method of claim 53, wherein one of the one or more display feature values corresponds to a multiple font capability of the requesting device.

40. (Previously Presented) The method of claim 53, wherein one of the one or more display feature values corresponds to an input capability of the requesting device.

41. (Previously Presented) The method of claim 53, wherein one of the one or more display feature values corresponds to an input bandwidth of the requesting device.

42. (Canceled)

43. (Previously Presented) The method of claim 53, wherein the determination to convert comprises:

determining to remove the annotations from the device-independent content.

44. (Previously Presented) The method of claim 53, wherein the requesting device comprises a wireless telephone.

45. (Previously Presented) The method of claim 53, wherein the determination to convert comprises:

determining an array of display pixels available in the requesting device based, at least in part, on the one or more display feature values;

comparing the array of display pixels with an array of image pixels corresponding to a content image;

selecting the content image for display in the requesting device if the array of image pixels does not exceed the array of display pixels; and

determining to suppress said content image from display if the array of image pixels does exceed the array of display pixels.

46. (Previously Presented) The method of claim 53, wherein the determination to convert comprises:

determining an aspect ratio for the requesting device based, at least in part, on the one or more display feature values; and

determining to send device-specific content in the determined aspect ratio to the device.

47. (Previously Presented) The method of claim 46, wherein the aspect ratio comprises a square aspect ratio.

48. (Previously Presented) The method of claim 46, wherein the aspect ratio comprises a portrait aspect ratio.

49. (Previously Presented) The method of claim 46, wherein the aspect ratio comprises a landscape aspect ratio.

50. (Previously Presented) A method comprising:

receiving device-independent content comprising markup information identifying one or more device feature values associated with the device-independent content, wherein the device-independent content is responsive to a content request from a device;

identifying one or more device feature values associated with the device;

matching at least one of the device feature values associated with the device-independent content with at least one of the device features values associated with the device;

based, at least in part, on the matching, determining to convert the device-independent content into device-specific content adapted to the device; and

determining to provide the device-specific content to the device.

51. (Previously Presented) A system, comprising:

a device detector configured to receive a content request from a device and to determine therefrom one or more device feature values associated with the requesting device;

an origin server configured to receive the content request and, in response thereto, to provide device-independent content corresponding to the content request, wherein the device-independent content comprises markup information identifying one or more device feature values associated with the device-independent content;

a transformer configured to receive the device-independent content from the origin server, to associate at least one of the device feature values associated with the device-independent content with at least one of the device features values associated with the device, and to transform the device-independent content into device-specific content formatted for the requesting device.

52. (Previously Presented) A non-transitory computer-readable storage medium carrying one or more sequences of one or more instructions which, when executed by one or more processors, cause an apparatus to at least perform the following steps:

receiving a request for content from a device;

based, at least in part, on the request, identifying one or more device display characteristics associated with the device;

receiving content responsive to the request, wherein the content comprises markup information identifying one or more content display characteristics, the content display characteristics expressing an author intent for displaying the content on a plurality of devices having different display characteristics;

matching one or more device display characteristics with one or more content display characteristics;

based, at least in part, on the matching, determining to convert the content into a device-dependent format compatible with one or more device display characteristics of the device; and

determining to transmit the device-dependent formatted content to the device.

53. (Previously Presented) A method comprising:

receiving a request for content from a device;

identifying one or more display feature values associated with the requesting device;

receiving device-independent content responsive to the request for content, the device-independent content comprising embedded annotations specifying author intent for displaying the content on a plurality of devices having different display characteristics, the embedded annotations including one or more content display feature values;

matching one or more display feature values associated with the requesting device with one or more content display feature values in the embedded annotations in the device-independent content; and

determining to convert the device-independent content into device-specific content based, at least in part, on the matching, the device-specific content compatible with one or more display feature values associated with the requesting device.

54. (Previously Presented) The method of claim 50, wherein the markup information comprises a first metatag identifying a first value for a first device feature and a second metatag identifying a second different value for the first device feature.

55. (Previously Presented) The method of claim 54, wherein the first metatag is associated with a first portion of requested content and the second metatag is associated with a related second portion of requested content, and wherein only one of the first portion and the second portion is included in the device-specific content.

56. (Previously Presented) An apparatus comprising:

at least one processor; and

at least one memory including computer program code for one or more programs,

the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform at least the following,

receive device-independent content comprising markup information identifying one or more device feature values associated with the device-independent content, wherein the device-independent content is responsive to a content request from a device;

identify one or more device feature values associated with the device;

match at least one of the device feature values associated with the device-independent content with at least one of the device features values associated with the device;

based, at least in part, on the matching, determine to convert the device-independent content into device-specific content adapted to the device; and

determine to provide the device-specific content to the device.

57. (Previously Presented) The apparatus of claim 56, wherein a plurality of the device feature values associated with the device each corresponds to either display size, aspect ratio, display line count, color capability, graphics capability, variable size text capability, different font capability, input capability, or a combination thereof.

58-60. (Canceled)

61. (Previously Presented) The method of claim 50, wherein the one or more device feature values correspond to physical characteristics of the device.

62. (Previously Presented) The method of claim 50, wherein the matching comprises accessing a device profile repository including feature-value data for a plurality of different types of devices.

63. (Previously Presented) The method of claim 56, wherein the matching comprises accessing a device profile repository including feature-value data for a plurality of different types of devices.

64. (Previously Presented) The method of claim 50, wherein the device is a network terminal device.